



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/527,490

11/17/2005

Dominique Petit

05-240

3577

34704 7590 09/23/2008

BACHMAN & LAPOINTE, P.C.
900 CHAPEL STREET
SUITE 1201
NEW HAVEN, CT 06510

EXAMINER

WOODALL, NICHOLAS W

ART UNIT

PAPER NUMBER

3733

MAIL DATE

DELIVERY MODE

09/23/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/527,490	Applicant(s) PETIT, DOMINIQUE	
	Examiner Nicholas Woodall	Art Unit 3733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 June 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11 and 13-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11 and 13-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 06/26/2008 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

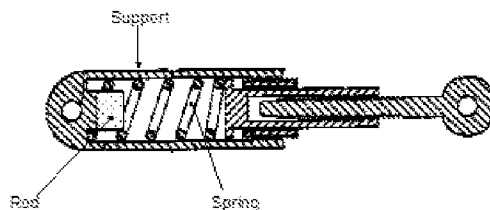
3. Claims 11, 13-15, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Atkinson (U.S. Patent 6,402,750).

Atkinson discloses a device comprising a support, a rod, and a spring (see Figure 1 below). The rod extends from the support and is coaxial with the support. The spring is a helical spring formed from a plurality of turns forming a cavity having an inner diameter larger than an outer diameter of the rod such that the rod is positioned within the cavity of the spring, wherein an axis of the spring is parallel with and substantially coaxial with an axis of the support. The turns of the spring further define an outer diameter that is larger than an inner diameter of the support, such as the outer diameter

Art Unit: 3733

of the rod, such that at least a portion of the turns are embedded, i.e. to support tightly or firmly (www.dictionary.com), in the support.

Figure 1



4. Claims 11, 13-15, 18, 23, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ferree (U.S. Publication 2003/0220643) in view of Commarmond (U.S. Patent 5,180,393).

Ferree discloses a device comprising a support made from a polymer material and a helical spring positioned substantially coaxial within the support. The support is cylindrical in shape and defines an infinite number of inner diameters. The spring is formed from a plurality of turns defining an outer diameter and an inner diameter, wherein the outer diameter is smaller than one of the inner diameters of the support. The examiner would like to note that the inner diameter of the support is not required to define a cavity in the support. All that is required is that the support includes an inner diameter smaller than the outer diameter of the spring. The spring is embedded, i.e. to surround tightly or firmly (www.dictionary.com), in the support as clearly shown in Figure 6C of the reference. Ferree fails to disclose the device further comprising a rod positioned within the spring element of the device. Commarmond teaches a device further comprising a rod positioned substantially coaxially within the turns of a spring

Art Unit: 3733

element, wherein the rod is a straight rod formed from curved coils having an outer diameter smaller than an inner diameter of the spring element in order to provide rigidity during traction to limit kyphosis/lordosis and the shearing of the discs (column 3 lines 33-37). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the device of Ferree further comprising a rod in view of Commarmond in order to provide rigidity during traction to limit kyphosis/lordosis and the shearing of the discs.

5. Claims 17, 17, 19, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ferree (U.S. Publication 2003/0220643) in view of Commarmond (U.S. Patent 5,180,393) further in view of Howland (U.S. Publication 2002/0173791).

The device of Ferree as modified by Commarmond discloses the invention as claimed except for the device further comprising at least one rigid U-shaped stiffening/linking element. Howland teaches a device comprising a substantially U-shaped stiffening/linking element connected between at least two implantable connecting assemblies in order to prevent the at least two implantable connecting assemblies from moving towards one another (page 2 paragraph 016). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the device of Ferree as modified by Commarmond further comprising a stiffening/linking element in view of Howland in order to prevent the at least two implantable connecting assemblies from moving towards one another.

Art Unit: 3733

6. Claims 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ferree (U.S. Publication 2003/0220643) in view of Commarmond (U.S. Patent 5,180,393) further in view of Schaffler-Wachter (U.S. Publication 2001/0012937).

The invention of Ferree as modified by Commarmond discloses the invention as claimed except for the device comprising a fork-shaped head with two lateral arms delimiting a space for receiving a respective linking element and a closure piece with a U-shape, two arms, and an internal thread for receiving a locking screw. The invention of Ferree as modified by Commarmond discloses a device further comprising bone anchors connected to the device in order to anchor the device to the spine. Schaffler-Wachter teaches a device further comprising bone anchors including forked-shaped heads (11) with two lateral arms defining a space (14) capable of receiving a linking element and a closure piece (7) with a U-shape, two arms, and an internal thread (18) for receiving a locking screw, wherein the lateral arms of the fork-shaped head have arc shaped shoulder with an inclined upper surface and the closure piece having complementary guide means for cooperating with the arc shaped shoulders when the closure piece is engage on the head in order to anchor the device to the spine. Because both the device of Ferree as modified by Commarmond and Schaffler-Wachter teach devices comprising bone anchors, it would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute one bone anchor for another in order to achieve the predictable results of anchoring the device to the spine.

Response to Arguments

7. Applicant's arguments filed 06/02/2008 have been fully considered but they are not persuasive. The applicant's argument that Ferree does not disclose a device wherein the spring element is at least partially embedded within the support is not persuasive. The examiner would like to note that a broad definition of "embedded" is to surround tightly or firmly (www.dictionary.com). Figure 6C of the reference clearly shows that the spring element is firmly surrounded by the support elements, i.e. sleeves, of the device. Furthermore, the claims do not limit which inner diameter of the support the outer diameter of the spring element must be larger than or that the inner diameter defines any other structural feature of the support. All the claim requires is that the spring element being within the support and that the support has ***an inner diameter smaller than the outer diameter of spring*** (emphasis added by the examiner).

Therefore, the examiner believes that Ferree clearly discloses these limitations. The applicant's argument that Ferree does not clearly show sleeves with an inner diameter is not persuasive. First, if the sleeves of the device do not have an inner diameter the examiner is unclear as to how the sleeves would be placed over the spring elements as disclosed by Ferree. Second, based on the figures given by Ferree, specifically Figures 6C and 10, there are only limited forms the sleeves of Ferree may have. If one uses a broad definition of the term "sleeve" a tubular piece, as of metal, fitting over a rod or the like (www.dictionary.com), then inherently a sleeve has an inner diameter. However, if the applicant does not agree with that reasoning Ferree does show an embodiment of the sleeves (see Figure 10 of the reference). As clearly shown in Figure 10 the sleeve

Art Unit: 3733

includes an inner diameter to allow the sleeve to fit over a rod-like element.

Furthermore, each embodiment that includes a sleeve clearly shows the sleeve fit around or enclosing the rod-like elements of each embodiment. Therefore, the examiner believes that the Ferree reference clearly shows sleeves including an inner diameter.

The applicant's argument that there is no reason to combine the Ferree and Commarmond references is not persuasive. Ferree discloses a device for inhibiting full extension between upper and lower vertebral bodies (page 1 paragraph 006) and if desired control spinal flexion (page 1 paragraph 007). Commarmond teaches a device for controlling spinal flexing by using a device comprising a primary winding located within a second winding, wherein the rigidity of the primary winding controls the spinal flexion in order to limit kyphosis/lordosis and the shearing of the discs. Therefore, the examiner believes that Commarmond teaches a reason for combining the devices, and the disclosure of Ferree does not teach away from such a combination because Ferree discloses one using his invention may wish to control spinal flexion.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892 for cited references the examiner felt were relevant to the application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicholas Woodall whose telephone number is (571)272-5204. The examiner can normally be reached on Monday to Friday 8:00 to 5:30 EST..

Art Unit: 3733

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eduardo Robert can be reached on 571-272-4719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Nicholas Woodall/

Examiner, Art Unit 3733

/Eduardo C. Robert/

Supervisory Patent Examiner, Art Unit 3733